BARNES & THORNBURG

BEFORE THE BOARD OF PATENT
APPEALS AND INTERFERENCES

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

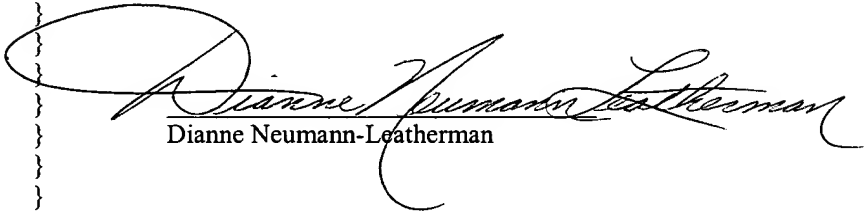|		
Customer No.:	**23641**	}
Application No.:	09/406,290	}
Confirmation No.:	1448	}
Filing Date:	September 24, 1999	}
Attorney Docket No.:	37168/82045	}
First Named Inventor:	Stephen H. Lewis, et al.	}
Group Art Unit:	3627	}
Examiner Name:	Christopher R. Buchanan	}
Title:	METHOD AND APPARATUS FOR PROVIDING RETIREMENT INCOME BENEFITS	}

<u>Certificate Under 37 CFR 1.8(a)</u>

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop Appeal Brief-Patents, Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450

on ___December 19, 2003___

Dianne Neumann-Leatherman

RECEIVED

JAN 0 5 2004

GROUP 3600

APPEAL BRIEF

Mail Stop Appeal Brief-Patents
Commissioner of Patents
P. O. Box 1450
Alexandria, VA 22313-1450

Sir:

A Notice of Appeal was filed in this application in accordance with 37 CFR §1.191 on August 21, 2003. This Appeal Brief is filed in accordance with 37 CFR §1.192. The requisite fee of $330.00 accompanies this brief pursuant to 37 CFR §1.17(f). A petition for an

extension of the period for response, with accompanying fee in the amount of $ 420.00, also accompanies this brief. Please credit any overpayment or charge any additional fees to the Deposit Account of Barnes & Thornburg, Account Number 02-1010 (37168/82045).

REAL PARTY IN INTEREST

Applicants have assigned their interest in this case to Lincoln National Life Insurance Company of Fort Wayne, Indiana (hereinafter "Appellant"). The assignments were recorded in the United States Patent and Trademark Office at Reel 011171 and Frame 0905, on October 13, 2000.

RELATED APPEALS AND INTERFERENCES

There are no other appeals or interferences known to the inventors, Appellant, or Appellant's legal representative which will directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

STATUS OF THE CLAIMS

Claims 1-43 are pending in this application. Claims 44-51 were previously cancelled, without prejudice. Claims 1-43 stand rejected under 35 U.S.C. Section 103(a), as detailed in the Final Office Action mailed on February 28, 2003. The claims appealed are all of Claims 1-43.

STATUS OF AMENDMENTS

No amendments to the claims were proposed following final rejection. However, a Response to the final rejection was filed on July 28, 2003. The Response was accompanied by an Affidavit pursuant to 37 C.F.R. Section 1.132. In an Advisory Action dated August 19, 2003, the Examiner indicated that Applicants "Request for Reconsideration" had been considered and would be entered into the file for purposes of appeal.

SUMMARY OF THE INVENTION

The following summary is provided in accordance with 37 C.F.R. § 1.192 (c)(5) and M.P.E.P. §1206 and correlates claim elements or steps to specific embodiments described in the application specification. Consistent with M.P.E.P. §1206, the following summary does not in any manner whatsoever limit the scope of the claims. Rather, the summary is provided only to facilitate the Board's understanding of the subject matter of the appeal.

The present invention relates to computerized methods for administering variable annuity benefit plans. Variable annuity plans are described in the specification, beginning at line 18 on page 3 and continuing through line 20 of page 5. Figures 1 and 2 of the drawings further illustrate the operation of such plans The claims of the present application are directed to computerized methods for use with variable annuity benefit plans having minimum benefit payment features. The advantages of such features to annuitants are referenced on page 5 of the specification, beginning in line 21. One aspect of the present invention relates to such methods which include new features that decrease the expense of (and, thus, increase the availability of) variable annuity benefit plans having minimum payment features. In such plans, if the insurer is required to make up differences between a specified minimum benefit payment and a benefit payment the annuitant would have otherwise received in the absence of the minimum benefit feature, future benefits are adjusted. Examples of such adjustments, and their impact on costs to the insurance company, are illustrated in the chart of Figure 3. Particular methods for implementing such features are illustrated by the charts of Figures 4 and 5, and are discussed in the accompanying portions of the specification (page 10, line 16 through page 14, line 9).

Another aspect of the invention relates to computer methods for administering variable annuity benefit plans which include a withdrawal program. This aspect of the invention is described in the specification, beginning on page 15, line 16, and is illustrated in the table of Figure 6. One embodiment of this method includes a distribution program which calls for a percentage withdrawal. Payments will be made to the annuitant as long as the withdrawal rate is

less than a predetermined maximum rate, even if the account value in the plan falls to zero. Another embodiment is directed to such a method which includes a guaranteed minimum payment feature and a systematic withdrawal program. In this embodiment, a scheduled payment is determined and will be paid periodically to the plan owner, even if the account value is exhausted. However, the amount of the scheduled payment is adjusted in the event unscheduled withdrawals are made under the plan. These embodiments are described in the specification at, for example, page 7, lines 5+.

ISSUES

The issues presented in this appeal are whether Claims 1-43 are obvious under 35 U.S.C. Section 103(a) in view of the references relied upon by the Examiner. The specific references and combinations relied upon by the Examiner are as follows: Claims 1-3, and 7-43 U.S. Patent No. 5,933,815 to Golden et al. ("Golden") in view of U.S. Patent No. 6,253,192 to Corlett et al. ("Corlett"); and Claims 4-6, Golden in view of U.S. Patent No. 6,085,174 to Edelman ("Edelman").

GROUPING OF CLAIMS

For the reasons set forth herein and for purposes of this appeal only, Appellant respectfully submits the appealed claims should be grouped as follows:

All independent claims stand alone;

Claims 2 and 3 stand or fall together with Claim 1;

Claims 5 and 6 stand or fall together with Claim 4;

Claim 8 stands or falls together with Claim 7;

Claims 9 and 10 stand alone;

Claims 13 and 14 stand or fall together with Claim 12;

- 4 -

Claim 16 stands alone;

Claims 18-25 stand or fall together with Claim 17;

Claim 27 stands alone;

Claims 28-34 stand or fall together with Claim 26;

Claims 36 and 37 stand or fall together with Claim 35.

Claim 38 stands alone; and

Claims 39-43 stand or fall with Claim 35.

ARGUMENT

I. THE METHODS OF CLAIMS 1-43 ARE PATENTABLE OVER GOLDEN, IN VIEW OF CORLETT OR EDELMAN

The Examiner erred in rejecting Claims 1-43 under 35 U.S.C. Section 103(a) in view of the Golden, Corlett, and/or Edelman references. All rejections being appealed are obviousness rejections under Section 103(a). All rejections rely on Golden as the primary reference.

The Golden patent is discussed in great detail in the Response to Office Action filed by Applicant on December 20, 2002, in response to the Examiner's initial Office Action. That discussion begins at the middle of page 5 and continues through the middle of page 10 of that Response. Golden is further discussed in numbered section 6 of the Affidavit (which begins at the top of page 4 of the Affidavit). Those discussions will not be repeated here.

Both the Examiner and Appellant agree that Golden does not anticipate any of the pending claims. Further, both Appellant and the Examiner agree that the computerized method and system disclosed by Golden relates to a fixed annuity plan.

A "fixed annuity" is a contract in which an insurance company agrees to pay to an annuitant a stipulated amount throughout the annuitant's lifetime, whereby the stipulated amount will not fluctuate regardless of adverse changes in the insurance company's mortality experience, investment return, and expenses. (See Affidavit, paragraph 5).

The claims of the present application relate to methods for administering variable annuity benefit plans. A variable annuity is a contract that, in exchange for a specified amount, pays an annuitant income payments which vary in accordance with the market values of the underlying investments purchased by the specified amount (Affidavit, paragraph 5).

In the Final Office Action, the Examiner takes the position that variable annuities are the general form of annuities, and that "fixed annuities are merely a special case of variable annuities in which the variability of the payments is zero." (Final Office Action dated February 28, 2003, page 11). Appellant respectfully submits that this position is erroneous. In the insurance and annuity industry, fixed annuities and variable annuities are distinct and separate products.

As noted, a fixed annuity is a contract which mandates periodic payments of stipulated amounts to an annuitant. This definition applies even if the "stipulated amounts" specify "level distributions or regularly increasing distributions which provide protection against the effects of inflation on the client's purchasing power." (See Golden, col. 9, lines 40+). In either case, the distributions are contractually mandated and do not vary with the values of the underlying investments.

A variable annuity, on the other hand, is a contract that pays an annuitant income payments which vary in accordance with the market values of the investments made by the insurance company. (Affidavit, paragraph 5). The term "variable" does not merely mean that payments are not always of equal amount (the Examiner's apparent understanding). Rather, payments vary in accordance with the market value of the assets underlying the payments.

While fixed annuity payments may "vary" in accordance with specific terms of the contract, by law they may not vary with the market value of the underlying investments. Therefore, fixed annuities are not, and cannot be properly viewed as, "merely a special case of variable annuities" as maintained by the Examiner (Affidavit, paragraph 5). As noted, the Golden patent relates exclusively to fixed annuities. (Affidavit, paragraph 6). The Examiner does not dispute this fact. The relevance of this undisputed fact to the Examiner's rejections of Claims 1-3, 7-16, 17-25, 26-34 and 35-43 is clear. For example, the Examiner states in his rejection of Claims 1-3, as follows:

> The method of Golden differs from the claimed method in that the target payment is not a guaranteed minimum payment that is reached by adjusting the amount of the periodically determined payment upwardly or downwardly so as to always have a value at least equal to the target payment (Claim 1).
>
> Corlett discloses a method for financial planning that allows payments to be adjusted upwardly or downwardly so as to always have a value at least equal to a selected target payment (see Figs. 5A and 5B).
>
> It would be obvious to one skilled in the art to modify the method of Golden to allow periodically determined payments to be adjusted upwardly or downwardly so as to always have a value at least equal to selected target payment, as taught by Corlett. To provide beneficiaries with a steady income. (Final Office Action, pg. 3).

Identical language is found in the last three paragraphs of numbered sections 4, 5 and 6 (addressing Claims 7-16, 17-25, and 26-34, respectively), and substantially identical language is found in the last three paragraphs of numbered section 7 (addressing Claims 35-43). (Final Office Action, pgs. 5-11).

As noted by the Examiner, Corlett discloses a method of financial planning. That method is intended for use by individuals. It includes a financial model created from data relating to an individual's income, expenses, assets and liabilities. A planning rules data base is created from data collected in interviews with the individual to ascertain financial objectives,

preferences and other information. The system projects an unplanned future financial situation and uses the planning rules database to calculate a planned future situation. The results of the plan and unplanned situations are then compared. Figs. 5A and 5B referred to by the Examiner depict an "automatic allocation and funding program" which utilizes data collected from the individual and entered into the rules planning database relating to the allocation of cash flow surpluses and the funding of deficits.

Appellant respectfully submits that it would not be obvious to one of skill in the art to modify the method of Golden to "allow periodically determined payments to be adjusted upwardly or downwardly so as to always have a value at least equal to a selected target payment." It is undisputed that Golden relates to a fixed annuity plan. The "selected target payment" referred to by the Examiner is the stipulated contract payment. As previously noted, the stipulated amount payable to an annuitant in a fixed annuity plan cannot be adjusted upwardly or downwardly from period to period, except for the very limited circumstance described by Golden in which the annuitant and insurance company agree in advance to predetermined increases to account for the effects of inflation. The amounts of the payments by law cannot fluctuate in accordance with the insurance company's mortality experience, investment return, or expenses. Thus, one skilled in the art would not be motivated to modify Golden to allow periodic upward or downward adjustment of the payments, since those payments cannot be adjusted other than as prescribed in the fixed annuity contract.

Assuming, *arguendo*, that one of skill in the art is motivated to modify Golden (which Appellant does not admit), the "automatic allocation and funding program" described by Corlett would not and could not be used for that purpose. As set forth in numbered section 9 on pages 6 and 7 of the Affidavit, the "method of personal financial planning such as disclosed by Corlett cannot, and would not, be used by an insurance company, or other plan provider, to determine the amounts of payments, nor to determine whether a 'target' has been met (or exceeded) nor for any other purpose." (Affidavit, pg. 7). This statement of fact by one of skill in the art is uncontroverted in this record. Simply put, the automatic allocation and funding

program intended by Corlett for use in a personal financial planning product is not intended for, and would not be acceptable for, use in determining payments to be made to an annuitant under an annuity contract.

The rejections of Claims 1-3 and 7-43 all rest on the following erroneous conclusions:

a)   that one of skill in the art would be motivated to adjust the payments specified in the fixed annuity plans of Golden; and

b)   that Corlett could be used to modify Golden to effect such adjustments.

Except for a possible suggestion provided in hindsight by the pending claims, there is no suggestion or motivation to modify the contractually-specified payments of the fixed annuity plans of Golden. Even if such suggestion or motivation is assumed, this record contains a statement from one of skill in the art which states that the personal financial planning program of Corlett could not be so used. That statement is unrefuted. Accordingly, the Examiner's rejections of Claims 1-3 and 7-43 must be reversed.

With reference to Claims 4-6, the Examiner states in the Final Office Action as follows:

> The method of Golden differs from the claimed method in that is does not compare the account withdrawal rate with a predetermined maximum withdrawal rate and make payments only if the withdrawal rate is below the maximum rate and the account balance is greater than zero [Claim 4].

> Edelman discloses a method for financial planning wherein the account withdrawals are monitored and payments are made only if the withdrawals comply with certain withdrawal criteria (Abstract, see Fig. 13). Edelman does not explicitly show the criteria to be a withdrawal rate that is below a maximum allowable rate in an account balance that is greater than zero, however, these are design choices that would be obvious to one skilled in the art to select and

any number of relevant criteria could be selected.

It would be obvious to one skilled in the art to modify the method of Golden so that the account withdrawals are monitored and payments are made only if the withdrawals comply with certain withdrawal criteria, as taught by Edelman, to provide optimal administration of investment assets.

The arguments advanced above in connection with Claims 1-3 and 7-43 apply in the case of Claims 4-6. Specifically, the Examiner recognizes that Golden "differs from the claimed method" and does not perform a comparison and then make payments only if the claimed conditions are met. Since Golden is specific to fixed annuity plans, and since payments under such plans are contractually mandated as discussed above, the Examiner's observation in this regard is not surprising. However, the Examiner goes on to suggest that it would be obvious to one skilled in the art to modify the fixed annuity plans of Golden so as to allow for "withdrawals" only under certain withdrawal criteria. Appellant respectfully submits that such modification would not be apparent to one of true skill in the art since that individual would recognize that payments in the Golden plan could not be withheld on the basis of such conditions. The central fact remains that Golden is directed exclusively to fixed annuities, while the claims of the present application are directed to methods for administering variable annuities. (Affidavit, pg. 7).

Even if one were to assume, *arguendo*, that one of skill in the art might be motivated to modify the fixed annuity plans of Golden, such modifications as might arguably be suggested by Edelman would not render the claimed subject matter obvious. Indeed, the Examiner admits that "Edelman does not explicitly show the criteria to be a withdrawal rate that is below a maximum allowable rate and an account balance that is greater than zero . . . ." The Examiner attempts to trivialize these explicitly conditions as "design choices that would be obvious to one skilled in the art." No support for this conclusion is given by the Examiner. Appellant respectfully suggests that a method for administering a variable annuity benefit account which includes a provision whereby the benefit payments would continue to be made even after the account balance falls to zero is far from trivial, and would not be obvious to one of

skill in the art. Thus, even if Golden is modified by application of the withdrawal criteria of Edelman, the modified Golden plan would not include all of the limitations of Claim 4.

For these reasons, Appellant respectfully submits that the Examiner's rejections of Claims 4-6 are in error and must be reversed.

II.   THE DEPENDENT CLAIMS

As set forth above under the heading "GROUPING OF CLAIMS," all independent claims stand alone. Several dependent claims have been designated by Appellant to stand or fall together with their respective independent claims. Appellant has made such designation strictly for purposes of this appeal, and does not intend such designation as an admission that these dependent claims do not contain subject matter that would independently support patentability. Rather, for purposes of this appeal only, Appellant chooses not to advance such arguments at this time. However, Appellant does wish to make certain remarks regarding certain ones of the dependent claims which stand alone.

Claim 9 states that, in the method of Claim 7, the data relating to a variable annuity account includes data relating to a maximum payment amount. Appellant respectful submits that there is no disclosure in Golden or Corlett to suggest the inclusion of such data. Indeed, the Examiner makes no specific reference to this claim or this limitation in the Office Actions. Accordingly, Appellant respectfully submits that dependent Claim 9 would independently support patentability.

Dependent Claim 10 depends from Claim 9 and adds a comparison step and an adjusting step to the method of preceding Claims 7 and 9. Although neither of these steps are shown in the art of record, the adjustment step alone would, for the reasons discussed above in connection with Golden and Corlett, independently support patentability of this claim.

Claim 16 is another dependent claim which, when viewed in combination with preceding independent Claim 15, would independently support patentability. None of the

references relied upon by the Examiner relate to the administration of variable annuity benefit plans having guaranteed minimum payment features. Thus, it goes without saying that none of these references disclose the specific formulas set forth in Claim 16 which describe an embodiment by which such administration may be accomplished.
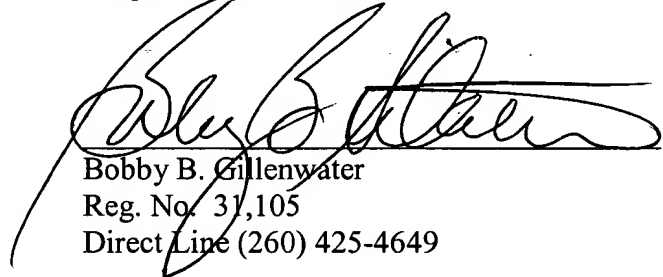
Claim 27 is a dependent claim which adds an additional step to the method of Claim 26. As discussed above, there is no motivation for reducing the contractually-mandated payments required under the fixed annuity plans of Golden by any amount, much less by an amount which is proportional to an excess of the periodic benefit, as set in step c of Claim 26, over the preliminary benefit calculated in step b of that claim. The additional step of Claim 27 further modifies this operation and is, thus, similarly undisclosed by the prior art. Accordingly, Claim 27 is considered by Appellant to stand alone.

Finally, Claim 38 depends from independent Claim 35 and specifies the formula by which the scheduled payment is adjusted in response to an unscheduled withdrawal. Such adjustment is not disclosed by the art relied upon by the Examiner. The specific formula set forth in Claim 38 is similarly not disclosed. Accordingly, Appellant respectfully submits that Claim 28 stands alone.

I. CONCLUSION

For the reasons set forth above, Appellant respectfully traverses the Examiner's rejections of Claims 1 - 43 under 35 U.S.C. Section 103(a). Reversals of each of the rejections entered by the Examiner are respectfully requested.

Respectfully submitted,

Bobby B. Gillenwater
Reg. No. 31,105
Direct Line (260) 425-4649

FWDS01 BBG 178256

APPENDIX A

<u>CLAIMS ON APPEAL</u>

1.   A computerized method for administering a variable annuity benefit plan having a guaranteed minimum payment feature, and for periodically determining the amount of a current benefit payment to be made to a beneficiary under the plan, comprising the steps of:

a)   storing data relating to a variable annuity account, including data relating to an account value, a guaranteed minimum payment, an assumed investment rate, a payout term and a period of benefit payments;

b)   determining an initial benefit payment amount;

c)   periodically determining an amount of a current benefit payment to be made under the plan, and comparing the amount determined with the guaranteed minimum payment;

d)   adjusting the amount of the periodically determined current benefit payment upwardly to the guaranteed minimum payment if the periodically determined amount is less than the guaranteed minimum payment;

e)   maintaining a cumulative total of actual payments made under the benefit plan;

f)   adjusting the amount of the periodically determined current benefit payment downwardly if the periodically determined amount is greater than the guaranteed minimum payment, and the cumulative total of actual payments exceeds a cumulative total of the initial payment and the periodically determined current benefit payments; and

g)   paying the adjusted amount of the current benefit payment to the beneficiary.

2. The method of Claim 1, wherein the amounts of the periodic current benefit payments are determined by the following formula:

$$\text{Benefit}_{t+1} = \text{Benefit}_t \ x \ \left[\frac{1+i}{1+AIR}\right]^{\frac{1}{p}}$$

where: Benefit_{t+1} = dollar amount of variable annuity benefit at time t+1

Benefit_t = dollar amount of variable annuity benefit at time t

i = actual fund performance during period t to t+1 (as a %)

AIR = assumed investment rate

p = the period of benefit payments

3. The method of Claim 1, further comprising the step of periodically redetermining the account value in accordance with the following formula:

$$\text{Account Value}_{t+1} = (\text{Account Value}_t - \text{Benefit}_t) \ x \ (1 + i) \ x \ (1 / p_y)$$

where: $\text{Account Value}_{t+1}$ = Account value at time t+1

Account Value_t = Account value at time t

Benefit_t = dollar amount of variable annuity benefit at time t

I = actual fund performance during period t to t+1 (as a %)

p_y = probability annuitant age y survives to age y+1

4. A data processing method for administering a variable annuity benefit account, comprising the steps of:

a. storing data relating to the variable annuity benefit account, including data relating to an account value at the time of annuitization and an initial benefit payment;

b. periodically recalculating a current benefit payment;

c. periodically recalculating the account value;

d. monitoring the account value balance and any withdrawals made by an annuitant;

e. comparing a withdrawal rate by which the account value is decreased by annuitant withdrawals with a predetermined maximum withdrawal rate; and

f. making benefit payments in accordance with the calculation set forth in step b. so long as;

1) the withdrawal rate is less than the predetermined maximum withdrawal rate, or

2) the account value balance is greater than zero.

5. The method of Claim 4, wherein the current benefit payment is determined by the following formula:

$$\text{Benefit}_{t+1} = \text{Benefit}_t \times \left[\frac{1+i}{1+AIR}\right]^{\frac{1}{P}}$$

where: Benefit_{t+1} = dollar amount of variable annuity benefit at time t+1

Benefit_t = dollar amount of variable annuity benefit at time t

i = actual fund performance during period t to t+1 (as a %)

AIR = assumed investment rate

p   =   the period of benefit payments

6.   The method of Claim 4, wherein the account value is recalculated in accordance with the following formula:

Account Value $_{t+1}$ = (Account Value $_t$ - Benefit $_t$) x (1 + i) x (1 / p $_y$)

where: Account Value $_{t+1}$ =   Account value at time t+1

Account Value $_t$ = Account value at time t

Benefit $_t$ =   dollar amount of variable annuity benefit at time t

i = actual fund performance during period t to t+1 (as a %)

p $_y$ = probability annuitant age y survives to age y+1

7.   A computerized method for administering a variable annuity benefit plan having a guaranteed minimum benefit payment feature, and for periodically determining the amount of a current benefit payment to be made to an owner under the plan, comprising the steps of:

a)   storing data relating to a variable annuity account, including data relating to at least one of periodic benefit payments, a guaranteed minimum benefit payment, an assumed investment rate, a payout term and a period of benefit payments;

b)   periodically determining an amount of a preliminary benefit payment under the plan, and comparing the amount determined with the guaranteed minimum benefit payment;

c)   periodically determining an amount of the current benefit payment under the plan which is the greater of the preliminary benefit payment and the guaranteed minimum benefit payment;

d)   maintaining a cumulative total of periodically determined preliminary benefit payments;

e)   maintaining a cumulative total of periodically determined current benefit payments;

f)   reducing the amount of the current benefit payment if the periodically determined preliminary benefit payment is greater than the guaranteed minimum payment, and the cumulative total of current benefit payments exceeds the cumulative total of preliminary benefit payments; and

g)   paying the current benefit payment to the owner.

8.   The method of Claim 7, wherein the amount of the preliminary benefit payment is determined by the following formula:

$$\text{Benefit}_{t+1} = \text{Benefit}_t \times \left[\frac{1+i}{1+AIR} \right]^{\frac{1}{p}}$$

where: Benefit_{t+1} =   dollar amount of variable annuity benefit at time t+1

Benefit_t =   dollar amount of variable annuity benefit at time t

i =   net fund performance during period t to t+1 (as a %)

AIR =   assumed investment rate for the period t to t+1

p =   the period of benefit payments.

9.   The method of Claim 7, wherein the data relating to a variable annuity account further includes data relating to a maximum payment amount.

10.   The method of Claim 9, further comprising the steps of comparing the periodically determined preliminary benefit payment to the maximum payment amount and adjusting the amount of the periodically determined preliminary benefit payment downwardly to the maximum payment amount if the periodically determined preliminary payment is greater than said maximum payment amount.

11.   A computerized method for administering a variable annuity benefit plan having a guaranteed minimum benefit payment feature, and for periodically determining the amount of a current benefit payment to be made to an owner under the plan, comprising the steps of:

a)   storing data relating to a variable annuity account, including data relating to at least one of periodic benefit payments, a guaranteed minimum benefit payment, an assumed investment rate, a payout term and a period of benefit payments;

b)   periodically determining an amount of a preliminary benefit payment;

c)   determining an amount of the current benefit payment from the preliminary benefit payment by:

1)   setting the amount of the current benefit payment to an amount which is less than the amount of the preliminary benefit payment if the preliminary benefit payment is greater than the guaranteed minimum payment, and if a cumulative total of previous benefit payments exceeds a cumulative total of previously determined preliminary benefit payments;

2)   setting the amount of the current benefit payment equal to the guaranteed minimum payment if the preliminary benefit payment is less than or equal to the guaranteed minimum payment; or

3)   otherwise, setting the amount of the current benefit payment equal to the amount of the preliminary benefit payment; and

d)   paying the current benefit payment to the owner.

12.   A computerized method for administering a variable annuity benefit plan having a guaranteed minimum payment feature, and for periodically determining the amount of a current benefit payment to be made to the owner under the plan, comprising the steps of:

a)   storing data relating to a variable annuity account, including data relating to at least one of an account value, a guaranteed minimum benefit payment, an assumed investment rate, survival probabilities, attained age annuity factors, a payout term and a period of benefit payment;

b)   periodically determining the account value and attained age annuity factor, and an amount of a preliminary benefit payment using the account value and attained age annuity factor;

c)   periodically determining an amount of the current benefit payment by comparing the guaranteed minimum benefit payment to the preliminary benefit payment and taking the larger of the two; and

d)   paying the current benefit payment to the owner.

13.   The method of Claim 12, wherein the account value is periodically determined by the following formula:

Account Value$_{t=1}$ = (Account Value$_t$ - Payment$_t$) x (1 + i) x (1/p$_y$)

Where: Account Value$_t$+1 = account value at time t+1

Account Value$_t$ = account value at time t

Payment$_t$ = dollar amount of the current benefit payment paid at time t

i = net fund performance during period t to t+1

P$_y$ = probability that annuitant age y survives to age y+1.

14.   The method of Claim 12, wherein the preliminary benefit payment is periodically determined by the following formula:

Benefit$_t$ = Account Value$_t$ \ AF$_t$

Where: Benefit$_t$ = dollar amount of current benefit payment at time t

Account Value$_t$ = account value at time t

AF$_t$ = attained age annuity factor at time t.

15.   A computerized method for administering a variable annuity benefit plan having a guaranteed minimum payment feature, and for periodically determining the amount of a current benefit payment to be made to the owner under the plan, comprising the steps of:

a)   storing data relating to a variable annuity account, including data relating to at least one of annuity units and unit values, an annuity reserve, a guaranteed minimum benefit payment, attained age annuity factors, a payout term and a period of benefit payments;

b)   periodically determining an amount of the annuity reserve;

c) periodically determining an amount of a preliminary benefit payment under the plan, and comparing the amount determined with the guaranteed minimum benefit payment to determine any shortfall between the preliminary benefit payment and the guaranteed minimum benefit payment;

d) periodically determining the current benefit payment by comparing the guaranteed minimum benefit payment to the preliminary benefit payment and taking the larger of the two; and

e) paying the current benefit payment to the owner.

16. The method of Claim 15, wherein the preliminary benefit payment is periodically determined using the following formulas:

$$Benefit_{t+1} = Benefit_t \times [(1+i) \setminus (1+AIR)] \quad \times [1 - (Shortfall_t/Reserve_t)]$$

$$Shortfall_t = Max[GuarMinPayment - Benefit_t, 0]$$

$$Reserve_t = Payment_t \times AF_t$$

Where: $Benefit_{t+1}$ = dollar amount of preliminary benefit payment at time t+1

$Benefit_t$ = dollar amount of preliminary benefit payment at time t

i = net fund performance during period t to t+1

AIR = assumed investment rate

$GuarMinPayment$ = guaranteed minimum benefit payment that is paid if $Benefit_t$ is less

$Shortfall_t$ = dollar amount that the guaranteed minimum benefit payment exceeds the preliminary benefit payment, $Benefit_t$

Payment$_t$ =   dollar amount of the current benefit payment paid to the owner at time t

AF$_t$ =   attained age annuity factor at time t

p =   the period of benefit payments.

17.   A computerized method for administering a variable annuity benefit plan having a minimum benefit payment feature, and for determining the amount of a periodic benefit payment to be made to an owner under the plan, comprising the steps of:

a)   storing data relating to a variable annuity account, including an account value and a minimum benefit payment;

b)   calculating a preliminary benefit payment in accordance with the terms of the annuity plan and using the previously stored account value;

c)   comparing the preliminary benefit payment to the minimum benefit payment and setting the periodic benefit payment equal to the minimum benefit payment if the preliminary benefit payment is less than or equal to the minimum benefit payment, and setting the periodic benefit payment equal to the preliminary benefit payment if the preliminary benefit payment is greater than the minimum benefit payment;

d)   calculating a new account value by reducing the preexisting account value by the amount of the periodic benefit payment;

e)   storing the new account value and the amount of the periodic benefit payment; and

f)   paying the periodic benefit payment to the owner.

18.   The method of Claim 17, further comprising the additional step of creating a master record for the variable annuity account, and wherein said storing steps include storing data on said master record.

19.   The method of Claim 18, wherein the step of creating a master record comprises the steps of providing an input screen having fields for entry of data relating to an annuitant, the type of annuity plan, relevant dates and amounts, and data relating to interest and mortality guarantees, entering data in the fields, and checking the data for validity and completeness.

20.   The method of Claim 19, further comprising the additional step of displaying the master record for visual checking by an operator, and storing the master record if the data is deemed to be satisfactory.

21.   The method of Claim 17, wherein the step of calculating a preliminary benefit payment further comprises the step of retrieving previously stored data relating to annuity factors, survivor factors and annuity unit factors.

22.   The method of Claim 17, comprising the additional step of determining the minimum benefit payment from a net amount available for purchase of the annuity plan, an annuity factor, and an annuity unit value.

23.   The method of Claim 17, wherein the step of calculating the preliminary benefit payment comprises the steps of dividing the account value by a previously stored annuity factor.

24.   The method of Claim 17, further comprising the additional step of generating a report, and forwarding the report to the annuitant.

25.   The method of Claim 17, further comprising the additional steps of generating at least one report, and storing data in at least one of an accounting file for use in preparing process and accounting records, a valuation file for use in establishing reserves, a payment center file for use in preparing benefit checks and report to annuitants, and a customer service file for use in preparing screens for use by customer service personnel.

26.   A computerized method for administering a variable annuity benefit plan having a minimum benefit payment feature, and for determining the amount of a periodic benefit payment to be made to an owner under the plan, comprising the steps of:

a)   storing data relating to a variable annuity account, including data relating to annuity units and annuity unit values, and a minimum benefit payment;

b)   calculating a preliminary benefit payment;

c)   comparing the preliminary benefit payment to the minimum benefit payment and setting the periodic benefit payment equal to the minimum benefit payment if the preliminary benefit payment is less than or equal to the minimum benefit payment, and setting the periodic benefit payment equal to the preliminary benefit payment if the preliminary benefit payment is greater than the minimum benefit payment;

d   reducing the annuity units by an amount proportional to an excess of the periodic benefit, as set in step c, over the preliminary benefit calculated in step b;

e)   storing the amount of the periodic benefit and the number of annuity units; and

f)   paying the periodic benefit payment to the owner.

27.   The method of Claim 26, further comprising the additional step of setting the number of annuity units to zero if the reduction of step d would otherwise result in the number of units being less than zero.

28.   The method of Claim 26, further comprising the additional step of creating a master record for the variable annuity account, and wherein said storing steps include storing data on said master record.

29.   The method of Claim 28, wherein the step of creating a master record comprises the steps of providing an input screen having fields for entry of data relating to an annuitant, the type of annuity plan, relevant dates and amounts, and data relating to interest and mortality guarantees, entering data in the fields, and checking the data for validity and completeness.

30.   The method of Claim 29, further comprising the additional step of displaying the master record for visual checking by an operator, and storing the master record if the data is deemed to be satisfactory.

31.   The method of Claim 26, wherein the step of calculating a preliminary benefit payment further comprises the step of retrieving previously stored data relating to annuity factors, and annuity unit factors.

32.   The method of Claim 26, comprising the additional step of determining the minimum benefit payment from a net amount available for purchase of the annuity plan, an annuity factor, and an annuity unit value.

33.   The method of Claim 26, further comprising the additional step of generating a report, and forwarding the report to the owner.

34.   The method of Claim 26, further comprising the additional steps of generating at least one report, and storing data in at least one of an accounting file for use in preparing process and accounting records, a valuation file for use in establishing reserves, a payment center file for use in preparing benefit checks and reports for the owner, and a customer service file for use in preparing screens for use by customer service personnel.

35.   A computerized method for administering a variable annuity plan having a guaranteed minimum payment feature associated with a systematic withdrawal program, and for periodically determining an amount of a scheduled payment to be made to the owner under the plan, comprising the steps of:

a)   storing data relating to a variable annuity account, including data relating to at least one of an account value, a withdrawal rate, a scheduled payment, a payout term and a period of benefit payments;

b)   determining an initial scheduled payment;

c)   periodically determining the account value associated with the plan and making the scheduled payment by withdrawing that amount from the account value;

d)   monitoring for an unscheduled withdrawal made under the plan and adjusting the amount of the scheduled payment in response to said unscheduled withdrawal; and

e) periodically paying the scheduled payment to the owner for the period of benefit payments, even if the account value is exhausted before all payments have been made.

36. The method of Claim 35, wherein the amount of the scheduled withdrawal payment is determined by the following formula:

Scheduled Payment = Account Value$_o$ x WD Rate

Where: Scheduled Payment = dollar amount of the scheduled payment

Account Value$_o$ = initial account value

WD Rate = % of the initial account value used to determine the initial scheduled payment.

37. The method of Claim 35, wherein the account value is periodically determined by the following formula:

Account Value$_{t+1}$ = Max[(Account Value$_t$ - Withdrawal), 0] x (1+i)

Where: Account Value$_{t+1}$ = account value at time t+1

Account Value$_t$ = account value at time t

Withdrawal = dollar amount of the scheduled payment at time t

i = net fund performance during period t to t+1.

38. The method of Claim 35, wherein the scheduled payment is adjusted in response to an unscheduled withdrawal, according to the following formula:

Scheduled Payment' = Scheduled Payment x (1 + USWithdrawal$_t$/Account Value$_t$)

Where: Scheduled Payment' = scheduled payment after an adjustment for an unscheduled withdrawal

Scheduled Payment = scheduled payment prior to an adjustment for an unscheduled withdrawal

US Withdrawal$_t$ =   unscheduled withdrawal made at time t

Account Value$_t$ =   account value at time t, prior to the unscheduled withdrawal.

39.   The method of claim 35, further comprising the additional step of creating a master record for the variable annuity account, and wherein said storing steps include storing data on said master record.

40.   The method of Claim 39, wherein the step of creating a master record comprises the steps of providing an input screen having fields for entry of data relating to the owner, the type of annuity plan, relevant dates and amounts, and data relating to interest and mortality guarantees, entering data in the fields, and checking the data for validity and completeness.

41.   The method of Claim 40, further comprising the additional step of displaying the master record for visual checking by an operator, and storing the master record if the data is deemed to be satisfactory.

42.   The method of Claim 35, further comprising the additional step of generating a report, and forwarding the report to the owner.

43.   The method of Claim 35, further comprising the additional steps of generating at least one report, and storing data in at least one of an accounting file for use in preparing process and accounting records, a valuation file for use in establishing reserves, a payment center file for use in preparing benefit checks and reports for the owner, and a customer service file for use in preparing screens for use by customer service personnel.